

and analysis of the dilution air. For evaporative testing, this requires measuring initial concentrations. (When testing methanol-fueled vehicles, manufacturers may choose not to measure background concentrations of methanol and/or formaldehyde, and then assume that the concentrations are zero during calculations.)

[58 FR 16032, Mar. 24, 1993, as amended at 59 FR 48508, Sept. 21, 1994; 60 FR 34347, June 30, 1995]

#### § 86.128-00 Transmissions.

Section 86.128-00 includes text that specifies requirements that differ from § 86.128-79. Where a paragraph in § 86.128-79 is identical and applicable to § 86.128-00, this may be indicated by specifying the corresponding paragraph and the statement “[Reserved]. For guidance see § 86.128-79.”

(a)–(c) [Reserved]. For guidance see § 86.128-79.

(d) The vehicle shall be driven with appropriate accelerator pedal movement necessary to achieve the speed versus time relationship prescribed by the driving schedule. Both smoothing of speed variations and excessive accelerator pedal perturbations are to be avoided.

(e)–(h) [Reserved]. For guidance see § 86.128-79.

[61 FR 54892, Oct. 22, 1996]

#### § 86.128-79 Transmissions.

(a) All test conditions, except as noted, shall be run according to the manufacturer's recommendations to the ultimate purchaser, *Provided, That*: Such recommendations are representative of what may reasonably be expected to be followed by the ultimate purchaser under in-use conditions.

(b) Vehicles equipped with free wheeling or overdrive, except as noted, shall be tested with these features operated according to the manufacturer's recommendations to the ultimate purchaser.

(c) Idle modes less than one minute in length shall be run with automatic transmissions in “Drive” and the wheels braked; manual transmissions shall be in gear with the clutch disengaged, except for the first idle mode (see §§ 86.134, 86.136, and 86.137). The

first idle mode and idle modes longer than one minute in length may be run with automatic transmissions in “Neutral;” manual transmissions may be in “Neutral” with the clutch engaged (clutch may be disengaged for engine start-up). If an automatic transmission is in “Neutral” during an idle mode, it shall be placed in “Drive” with the wheels braked at least 5 seconds before the end of the idle mode. If a manual transmission is in “Neutral” during an idle mode, it shall be placed in gear with the clutch disengaged at least 5 seconds before the end of the idle mode.

(d) The vehicle shall be driven with minimum accelerator pedal movement to maintain the desired speed.

(e) Accelerations shall be driven smoothly following representative shift speeds and procedures. For manual transmissions, the operator shall release the accelerator pedal during each shift and accomplish the shift with minimum time. If the vehicle cannot accelerate at the specified rate, the vehicle shall be operated at maximum available power until the vehicle speed reaches the value prescribed for that time in the driving schedule.

(f) The deceleration modes shall be run in gear using brakes or accelerator pedal as necessary to maintain the desired speed. Manual transmission vehicles shall have the clutch engaged and shall not change gears from the previous mode. For those modes which decelerate to zero, manual transmission clutches shall be depressed when the speed drops below 15 mph (24.1 km/h), when engine roughness is evident, or when engine stalling is imminent.

(g)(1) In the case of test vehicles equipped with manual transmissions, the transmission shall be shifted in accordance with procedures which are representative of shift patterns that may reasonably be expected to be followed by vehicles in use, in terms of such variables as vehicle speed or percent rated engine speed. At the Administrator's discretion, a test vehicle may also be shifted according to the shift procedures recommended by the manufacturer to the ultimate purchaser, if such procedures differ from those which are reasonably expected to be followed by vehicles in use.